

## ABSTRACT

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The present invention provides oligonucleotide libraries capable of detecting RNA transcripts and RNA splice variants which populate a transcriptome and which are transcribed from genes or transcription units that populate the corresponding genome. The present invention also provides

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oligonucleotide arrays generated from the oligonucleotide libraries and methods of using the oligonucleotide libraries in various oligonucleotide detection systems and expression profiling studies. Antisense molecules and double-stranded interfering RNAs, which are types of oligonucleotides, based on the oligonucleotides disclosed herein also are provided.

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